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RECORD OF ORAL HEARING
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MILES STEPHEN CAIN and
IAIN THOMAS ARTHUR FINDEN

Appeal 2009-012094
Application No. 10/549,877
Technology Center 1700

Oral Hearing Held: April 13, 2010

Before EDWARD C. KIMLIN, TERRY J. OWENS, and
PETER F. KRATZ, Administrative Patent Judges

ON BEHALF OF THE APPELLANTS:

JACOB A. SNODGRASS
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1 The above-entitled matter came on for hearing on
2 Tuesday, April 13, 2010, commencing at 2:13 p.m., at the U.S. Patent
3 and Trademark Office, 600 Dulany Street, Alexandria, Virginia,
4 before Lori B. Allen, Notary Public.

5 JUDGE KIMLIN: Good afternoon, Mr. Snodgrass.

6 MR. SNODGRASS: Good afternoon.

7 JUDGE KIMLIN: Our reporter today is Lori Allen.

8 MR. SNODGRASS: Hello.

9 JUDGE KIMLIN: If you have a card, she'd appreciate it.

10 MR. SNODGRASS: I'm sorry?

11 JUDGE KIMLIN: Business card?

12 MR. SNODGRASS: Yes.

13 JUDGE KIMLIN: We have two examiners watching the
14 proceedings today, and you can begin when you're ready.

15 MR. SNODGRASS: Thank you. May it please the Court,
16 my name is Jacob Snodgrass, and I represent the Appellants in this
17 matter. The rejections should be reversed because there are two
18 features in independent Claim 1 that are not taught by the prior art, as
19 alleged by the Examiner. Only Claim 1 is on appeal. This claim
20 recites a fabric substrate, a barrier layer on the fabric and an adhesive
21 layer on the barrier layer.

22 There are two key features to the barrier layer. One, it is
23 impervious, and two, it prevents absorption of the adhesive layer into
24 the fabric substrate.

25 Claim 1 currently stands rejected under 103 as being
26 unpatented -- unpatentable, over Nakamura in view of Furuno. The

1 two key features of the barrier layer I just recited are alleged to be
2 disclosed in Nakamura, so this appeal turns on whether or not the
3 prior art discloses the two key features of the barrier layer. Again,
4 one, it is impervious, and two, it prevents absorption of the adhesive
5 layer into the fabric.

6 First --

7 JUDGE KIMLIN: Now Mr. Snodgrass, was it known to
8 you this cured adhesive silicone gel on fabrics to adhere to the skin?

9 MR. SNODGRASS: That is correct, your Honor. That
10 was in the prior art. But there wasn't a means of preventing the gel
11 from exuding through the fabric onto the other side, which would
12 have numerous --

13 JUDGE KIMLIN: Aren't barrier layers conventionally
14 used in fabrics to prevent moisture absorption and the like? Basically,
15 I'm asking you why wouldn't it be obvious to use a barrier layer once
16 you saw a problem with the gel getting into the fabric?

17 MR. SNODGRASS: I would imagine there would be
18 problems finding layers that were compatible with each other, means
19 of manufacturing it in an efficient manner. And I think the art that has
20 been applied against this claim does not teach those features, and I'm
21 not aware of any other art. The --

22 JUDGE KIMLIN: But it was known to use a silicone gel
23 adhesive on a fabric --

24 MR. SNODGRASS: That is correct.

25 JUDGE KIMLIN: -- the barrier layer?

26 MR. SNODGRASS: That is correct.

1 JUDGE KIMLIN: Okay.

2 MR. SNODGRASS: The Examiner has alleged that layer
3 11 of Nakamura is a barrier layer, as claimed. However, this layer is
4 not impervious. Instead, as is disclosed in paragraph 36 of Nakamura,
5 it has vent holes. A layer with holes is not impervious.

6 JUDGE KIMLIN: Are those vent holes required, or
7 optional?

8 MR. SNODGRASS: The -- Nakamura says that it
9 contains vent holes. It does not give two embodiments, one with and
10 one without.

11 Second, layer 11 of Nakamura does not prevent absorption
12 of an adhesive silicone gel into a fabric substrate. Instead, in
13 Nakamura the adhesive is already cured prior to installation on the
14 fabric. This is disclosed in paragraphs 45 through 47 of Nakamura.
15 In other words, the adhesive would not absorb into the fabric with or
16 without barrier layer 11, because it's already cured.

17 In arriving at the conclusion of obviousness, the Examiner
18 misreads Nakamura in two respects. First, I just described the way in
19 which the adhesive layer is already cured prior to installation in
20 Nakamura. That position has been advanced by us throughout the
21 prosecution, and the Examiner has always maintained that we are
22 relying on a prior art embodiment that the Examiner is not relying on.
23 But the -- paragraphs 45 through 47, which describe the
24 manufacturing of the film layer -- I'm sorry, of the layer sheet -- is the
25 only embodiment in Nakamura describing how to manufacture a layer
26 sheet.

1 A layer sheet in Nakamura is essentially the layer 11,
2 alleged to be the barrier layer and an adhesive layer. Nakamura
3 manufactures those two together, cures them, and then installs them
4 onto a cloth. There are three ways that they can be installed on a
5 cloth. One is by sewing. One is using a hot melt layer, heating them
6 and then welding them together. Another is with a core member.

7 So there are multiple embodiments as to how to get the
8 layer sheet onto the fabric, but there is only one means of
9 manufacturing the layer sheet disclosed in Nakamura. And again,
10 that's in paragraph 45 through 47, which comes under the heading,
11 "manufacturing of the layer sheet." That's the only -- those are the
12 only paragraphs under that section. Subsequent to that there are
13 paragraphs entitled "installation by sewing," "installation by heating,"
14 "installation with a core member." Again, multiple ways of installing
15 them, but only one way of manufacturing them.

16 Second, the Examiner also relies heavily on paragraph 66
17 of Nakamura in alleging that barrier layer 11 prevents absorption of
18 an adhesive into a fabric substrate. But I think it's important to put
19 paragraph 66 in context. At the very beginning of Nakamura they
20 discuss the prior art where one is trying to prevent sagging of articles
21 of clothing and installing sag-preventive members. They disclose that
22 applying silicone directly to the fabric is one way of overcoming this,
23 and then they discuss the drawbacks of it, one being that it can seep
24 through the fabric. After pointing out the problems in the prior art,
25 Nakamura discloses the invention. And then at the very end, which is
26 where paragraph 66 comes in, the inventors list the benefits of their

1 invention. And in paragraph 66 they provide -- the current invention
2 avoids liquid silicone gum from being exuded onto the outer surface
3 of the cloth.

4 Now a proper interpretation of that is Nakamura has
5 dispensed with the need to apply a liquid silicone gum to the fabric at
6 all. Instead, they manufacture the layer sheet beforehand, cure the
7 adhesive layer, and then install it to the fabric.

8 JUDGE KRATZ: Are you saying that the -- this gum
9 could not be used as part of that manufacturing step for the adhesive
10 of Nakamura?

11 MR. SNODGRASS: I'm sorry, Your Honor. Could you
12 please repeat --

13 JUDGE KRATZ: In other words, when you make this
14 sheet of this film of the -- that you use -- sheet 11, the sheet that has
15 the film layer 11 and then the adhesive layer. You're saying that the
16 adhesive layer could not be this gum layer?

17 MR. SNODGRASS: That could not be exuded onto the
18 fabric or through the fabric.

19 JUDGE KRATZ: But why wouldn't that film layer also
20 prevent it from exuding onto the fabric?

21 MR. SNODGRASS: Because it's already cured by the
22 time it gets installed onto the fabric.

23 JUDGE KRATZ: What we're talking about is a
24 product -- the question I have is why is that not an element of the
25 product, that it's capable of preventing the gum layer from exuding
26 into the fabric? It's a hot mold adhesive that's going to form

1 a -- presumably an impervious -- now you're saying it's pervious,
2 because of the holes in it.

3 MR. SNODGRASS: Yes, Your Honor.

4 JUDGE KRATZ: And you're saying those are
5 not -- you're saying it doesn't disclose the option of not having those
6 holes, although the holes aren't necessarily required, at least in -- early
7 on in the description of the invention it seems to be an -- seems to be
8 disclosed as an option. But your argument is that it's not an option.

9 MR. SNODGRASS: I don't believe -- I believe that
10 paragraph 36, which is in the detailed description, only provides for
11 one embodiment, which is the presence of vent holes, and goes on to
12 describe why they are beneficial. In order to maintain a breathable
13 condition, is the terminology used in Nakamura.

14 So not only do they describe that as the only embodiment,
15 but they also, I think, teach away from not having vent holes. So I
16 think for that reason the impervious feature is not disclosed. And I
17 also believe the prevents absorption feature is not disclosed, because
18 the adhesive in Nakamura is already cured prior to installation.

19 Your Honor, I want to make sure that I properly address
20 the first part of your question, which was the --

21 JUDGE KRATZ: Yeah. Yeah. Well, the reason why I
22 wanted to go back to that, because the second part of the issue in front
23 of us is that the Examiner really applied two references, and
24 said -- and made a -- and indicated that it had been obvious to one of
25 ordinary skill in the art to substitute the materials that Nakamura uses

1 for his adhesive layer and his film layer, and use instead the materials
2 that are in the secondary reference, Furuno.

3 MR. SNODGRASS: Right.

4 JUDGE KRATZ: And I believe that that particular
5 rationale that the Examiner gave for making that substitution has not
6 been addressed at all in the Brief or Reply Brief. Am I correct on
7 that?

8 MR. SNODGRASS: Well, I think the Examiner's main --

9 JUDGE KRATZ: But you don't argue that substitution
10 theory that the Examiner makes?

11 MR. SNODGRASS: I don't believe that one of ordinary
12 skill in the art would be prompted to substitute the --

13 JUDGE KRATZ: In the Brief, I meant. Is there an
14 argument in the Brief or Reply Brief on that?

15 MR. SNODGRASS: I don't believe so, Your Honor. I
16 believe --

17 JUDGE KRATZ: So that would leave just the sole
18 argument that you really have to make for the rejection that's made in
19 that respect, that the -- that there would -- that you wouldn't have this
20 impervious feature even if you -- presumably, it would be the only
21 argument you would have left, it would seem.

22 MR. SNODGRASS: I believe -- I believe that the
23 absorption feature would still not be disclosed, even if the layers of
24 Nakamura were substituted with Furuno. I don't believe that one
25 could, or that one would be prompted to, because Nakamura discloses

1 the benefits of having holes in their layers, so I think they teach away
2 from incorporating Furuno into the sag preventive --

3 JUDGE KIMLIN: Why wouldn't that be an option for one
4 of ordinary skill in the art, to use the holes for vents or to not use it to
5 prevent the total absorption? It seems like it's well-settled that the
6 elimination of a feature of the prior art, along with its function, is a
7 matter of obviousness.

8 MR. SNODGRASS: I think that even if that were the
9 case, Your Honor, even if continuous layers hole-free were used in
10 Nakamura, the prevents absorption feature would still not be
11 disclosed, because there are -- the layer sheet would be comprised of a
12 barrier layer level 11 and a cured adhesive layer 12, which is already
13 cured, and which would not be absorbed into the fabric with or
14 without barrier layer 11.

15 So I don't -- so to answer your question, Your Honor, I
16 don't believe one would be prompted, because I think Nakamura
17 teaches away from that. And even if it were --

18 JUDGE KIMLIN: You're saying because it's cured it
19 wouldn't prevent absorption, because it can't be absorbed, anyway?

20 MR. SNODGRASS: That's correct.

21 JUDGE KIMLIN: Well, it would seem, then, that the
22 barrier layer would perform the function of preventing it, as well, if
23 it's not going to happen.

24 MR. SNODGRASS: Well, Your Honor, I believe that it
25 would not be absorbed because it is cured, not because of the presence
26 of barrier layer 11.

1 JUDGE KIMLIN: I understand.

2 JUDGE KRATZ: One question I have on that point, too,
3 is at the sentence bridging -- beginning -- the sentence bridging pages
4 4 and 5 of your spec and the subsequent sentences following on top of
5 page 5, it seems that you do disclose this idea of having discontinuous
6 layers of adhesive with small holes it, in the layer. And I presume
7 what you are saying is that your claim does not cover that
8 embodiment because it says "impervious?"

9 MR. SNODGRASS: That is correct. And I would also
10 like to point out that that paragraph only discusses holes in the -- I'm
11 sorry, in the adhesive layer itself, not in the -- not in the barrier layer.
12 But again, that's not claimed.

13 JUDGE KRATZ: Then how would you get air
14 permeability if you didn't have it in the barrier layer, to the fabric?

15 MR. SNODGRASS: Well, I suppose -- Your Honor, I
16 suppose you're right. But again, it's -- that is not claimed. So what
17 is --

18 JUDGE KRATZ: Okay.

19 MR. SNODGRASS: Yeah. What is claimed is just an
20 impervious continuous layer.

21 In conclusion, Your Honors, Nakamura -- the layer of
22 Nakamura has holes. It is not impervious. It does not prevent
23 absorption of an adhesive layer. Rather, that is prevented because it's
24 already cured.

25 That's all I had prepared. If there are any further
26 questions --

1 JUDGE KIMLIN: We have no further questions.
2 MR. SNODGRASS: Okay, thank you.
3 JUDGE KIMLIN: Thank you for coming.
4 Whereupon, at 2:28 p.m., the proceedings were concluded.
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